

SI/cs 030856WO

18 October 2004

ABSTRACT

The invention relates to a method for the production of cast steel strip (B), wherein, in a continuous procedure, a steel melt is cast into a casting gap (4), the longitudinal sides of which are formed by walls that move during the casting process, to form the steel strip (B), and the steel melt, which is present above the casting gap (4) in a melt pool (6), is held under an atmosphere (A) containing nitrogen and hydrogen. According to the invention, a method of this type allows the production of high-quality steel strips having a significantly improved surface composition compared to the prior art in that the hydrogen content of the atmosphere (A) is greater than 0 mol % to 10 mol %, and the Cr, Mo, Nb, Si, Ti, Ni, Mn, C or N contents of the cast steel melt, which are selectively present in each case for adjusting the characteristics of the steel strip (B), are in each case selected in such a way that for the ratio Cr_{eq}/Ni_{eq} formed from the Cr equivalent Cr_{eq} and the Ni equivalent Ni_{eq} , the following applies: $Cr_{eq}/Ni_{eq} \geq 1.7$, wherein $Cr_{eq} = \%Cr + 1.37 \%Mo + 2 \%Nb + 1.5 \%Si + 3 \%Ti$ and $Ni_{eq} = \%Ni + 0.31 \%Mn + 22 \%C + 14 \%N + \%Cu$, $\%Si$ = respective Si content, $\%Ti$ = respective Ti content, $\%Ni$ = respective Ni content, $\%Mn$ = respective Mn content, $\%C$ = respective C content, $\%N$ = respective N content.

The single figure is intended for the abstract.